

Title (en)
SYSTEM AND METHOD FOR ANTENNA DIAGNOSIS

Title (de)
SYSTEM UND VERFAHREN ZUR DIAGNOSE BEI ANTENNEN

Title (fr)
SYSTEME ET PROCÉDÉ POUR LE DIAGNOSTIC D'ANTENNES

Publication
EP 3995842 A4 20230830 (EN)

Application
EP 20837163 A 20200626

Priority
• ES 201900105 A 20190705
• ES 2020000031 W 20200626

Abstract (en)
[origin: EP3995842A1] The invention relates to a system and method for antenna diagnosis, which comprises a probe antenna (1) that is moved manually by an operator relative to the antenna being measured (3) describing an arbitrary path (7) that collects the radiated signal (2). It also comprises a radiofrequency unit (4) which measures the properties of said signal, a positioning means (5) for positioning the probe antenna (1), and a processing system which diagnoses the antenna being measured (3). The method comprises defining a reference surface (15), moving the probe antenna (1) close to the antenna being measured (3), homogenising the sampling, processing the information and performing a diagnosis by calculating the tangential component of the field. The invention is useful in industries where antenna diagnosis is required, such as in the communications industry. It is of particular interest in 5G networks.

IPC 8 full level
G01R 29/10 (2006.01)

CPC (source: EP ES)
G01R 29/10 (2013.01 - EP ES)

Citation (search report)
• [A] US 2019086459 A1 20190321 - ALAVI REZVAN RAFIEE [CA], et al
• [A] CN 106291130 A 20170104 - KUNSHAN HAMILTON COMMUNICATION TECH CO LTD
• [AD] HE HUI ET AL: "The Development of an EM-Field Probing System for Manual Near-Field Scanning", IEEE TRANSACTIONS ON ELECTROMAGNETIC COMPATIBILITY, IEEE SERVICE CENTER , NEW YORK , NY, US, vol. 58, no. 2, 1 April 2016 (2016-04-01), pages 356 - 363, XP011602093, ISSN: 0018-9375, [retrieved on 20160309], DOI: 10.1109/TEM.2015.2496376
• See also references of WO 2021005250A1

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